

#2/10  
11/2/01  
PATENT  
P56533

Jc872 U.S. PTO  
09/964375  
09/28/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

JONG-SEO CHOI et al.

Serial No.: *to be assigned*

Examiner: *to be assigned*

Filed: 28 September 2001

Art Unit: *to be assigned*

For: CATHODE FOR ELECTRON TUBE AND METHOD OF PREPARING THE  
CATHODE

**INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner  
for Patents  
Washington, D.C. 20231

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites,  
provides copies and discusses the following art references:

<u>US Patent No.</u>	<u>Inventor</u>	<u>Date</u>
• 5,592,043	Gärtner et al.	1/97

<u>Foreign Patent No.</u>	<u>Inventor</u>	<u>Date</u>
• KR1993-0011964	Saito et al.	12/93 *equivalent to JP3-257735
• JP3-257735	Saito et al.	11/91 *equivalent to KR1993-0011964
• JP8-50849	Narita et al.	2/96 *equivalent to EP0685868 A1
• EP0685868 A1	Narita et al.	12/95 *equivalent to JP8-50849
• JP6-28968	Gärtner et al.	2/94 *equivalent to EP0560436 A1
• EP0560436 A1	Gärtner et al.	9/93 *equivalent to JP6-28968

**Other reference**

- "Progress on the Percolation Cathode", by Hodgson et al., in IDW '99 Proceedings of the Sixth International Display Workshops CRT6-4 (Late-News Paper), page 1111-1112

Gärtner et al.'043 discloses cathode including a solid body.

Saito et al.'964 discloses cathode for electron tube to enable actions under high current density which is equal to or more than  $2 \text{ A/cm}^2$  by forming a specified metallic layer on a substrate, and thereby forming a specified electron emissive material layer so as to be adhered.

Saito et al.'735 discloses cathode for electron tube to enable actions under high current density which is equal to or more than  $2 \text{ A/cm}^2$  by forming a specified metallic layer on a substrate, and thereby forming a specified electron emissive material layer so as to be adhered.

Narita et al.'849 discloses cathode member and electronic tube using it, to provide a cathode which improves the distribution of emitted electrons in low operation temperature and emits an emission current in high density stably for a long period by making the cathode out of cathode member which contains Ni, metal having reductive action and an electron emitting agent and is processed into a mirror face after unification.

Narita et al.'868 discloses cathode member and electron tube having the cathode member mounted thereon.

Gärtner et al.'968 discloses cathode containing solid with which a high discharge current density and a long lifetime are obtained even at a low service temperature.

Gärtner et al.'436 discloses cathode having a solid element which contains metallic components and oxidic components.


The article "Progress on the Percolation Cathode" discloses an oxide cathode having a percolation path made by adding 2.5 to 5% by volume of needle-shaped nickel grains to an electron-emitting material layer.

The citation of the foregoing references is not intended to constitute an assertion that other or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-

ranging and thorough search of the relative arts.

No fee is incurred by this Statement.

Respectfully submitted,

  
Robert E. Bushnell  
Reg. No.: 27,774

1522 "K" Street, N.W., Suite 300  
Washington, D.C. 20005  
Area Code: 202-408-9040

Folio: P56533  
Date: 28 September 2001  
I.D.: REB/sb